

Shown is the 3'UTR of the human IL1B sequence from accession number M15330.

* Represents the stop codon.

*AGAGAGCTGTACCCAGAGAGTCCCTGTGCTGAATGTGGACTCAATCCCTAG
GGCTGGCAGAAAGGGAACAGAAAGGTTTTTGTAGTACGGCTATAGCCTGGAC
TTTCCCTGTTGTCTACACCAATGCCCAACTGCCCTGCCCTAGGGTAGTGCTAA
GAGGATCTCCTGTCCATCAGCCAGGACAGTCAGCTCTCTCCTTCAGGGCC
AATCCCAGCCCTTTTGTGAGCCAGGCCCTCTCTCACCTCTCCTACTCACT
TAAAGCCCGCTGACAGAAACACGGCCACATTTGGTCTAAGAAACCCCTC
TGTCATTGCTCCACATCTGATGAGCAACCCCTTCCCTATTTATTTATT
TAATTGTTTGTGTTTATTCATTGCTTAATTTATTCAAAGGGGGCAAG
AAGTAGCAGTGTCTGTAAAGAGCCCTAGTTTTTAATAGCTATGGAATCAAT
TCAATTGGACTGGTGTGCTCTCTTTAAATCAAGTCCTTTAATTAAGACTG
AAAATATATAAGCTCAGATTATTTAAATGGGAATATTTATAAATGAGCAA
TATCATACTGTTCAATGGTTCTGAAATAAACTTCTCTGAAG

FIGURE 1

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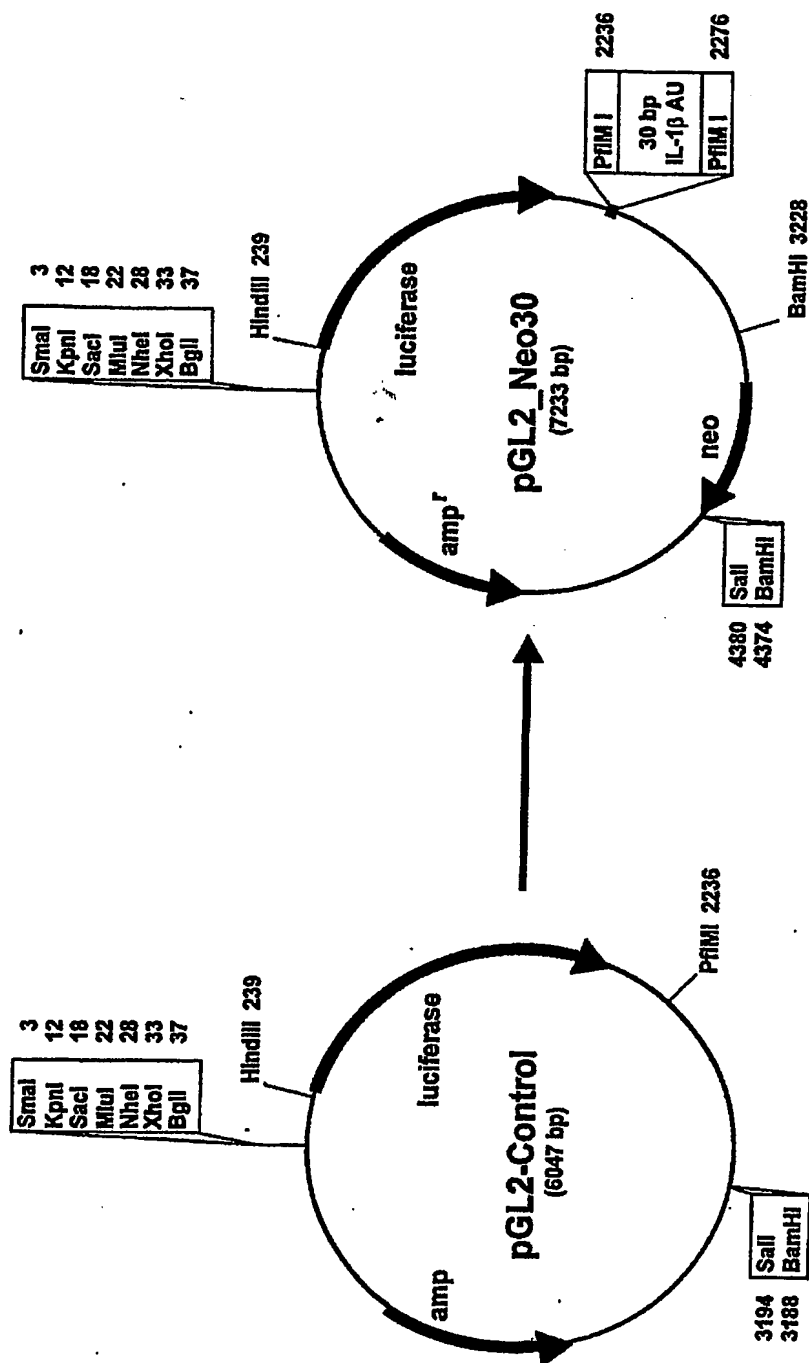


FIGURE 3A

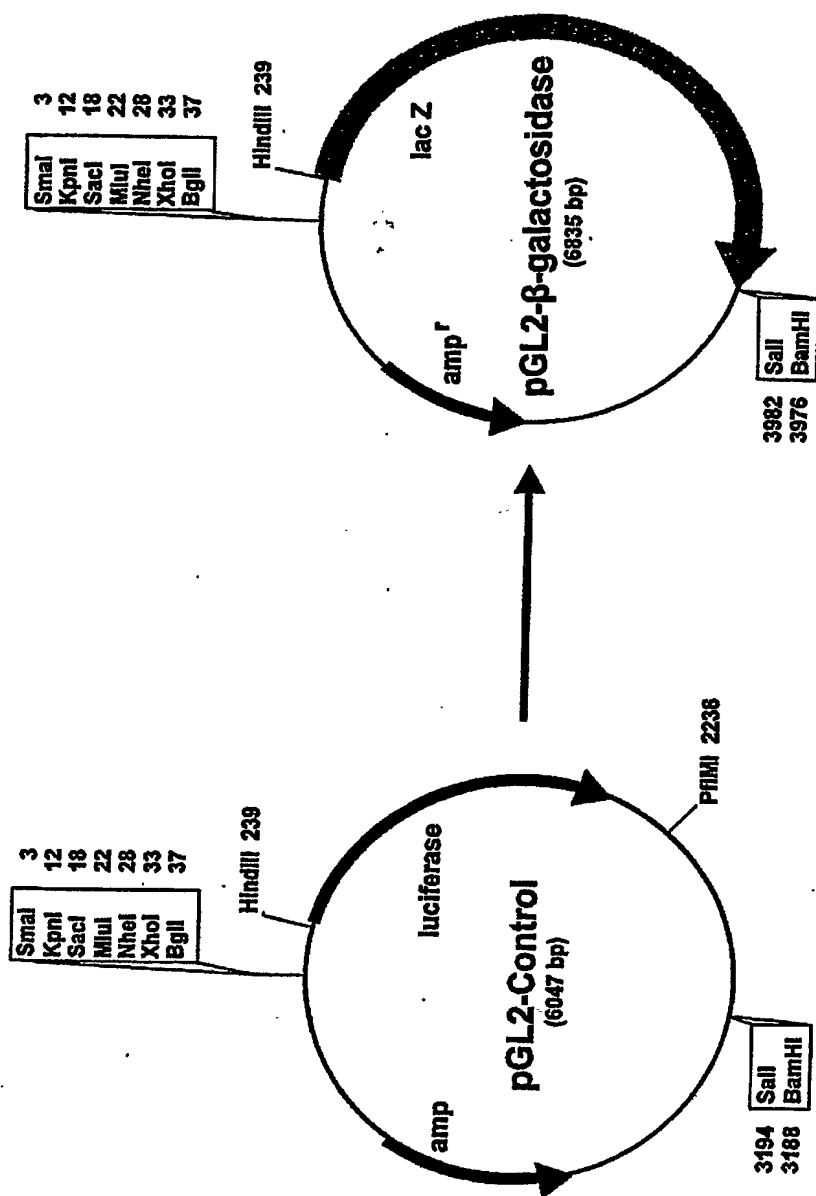


FIGURE 3 B

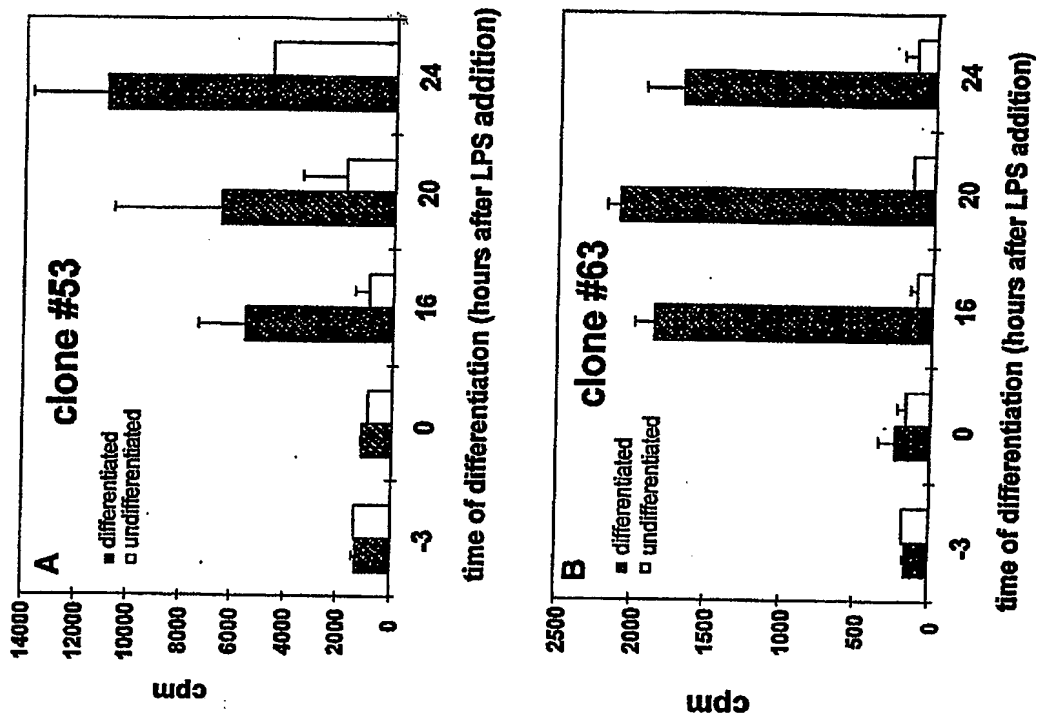


FIGURE 4

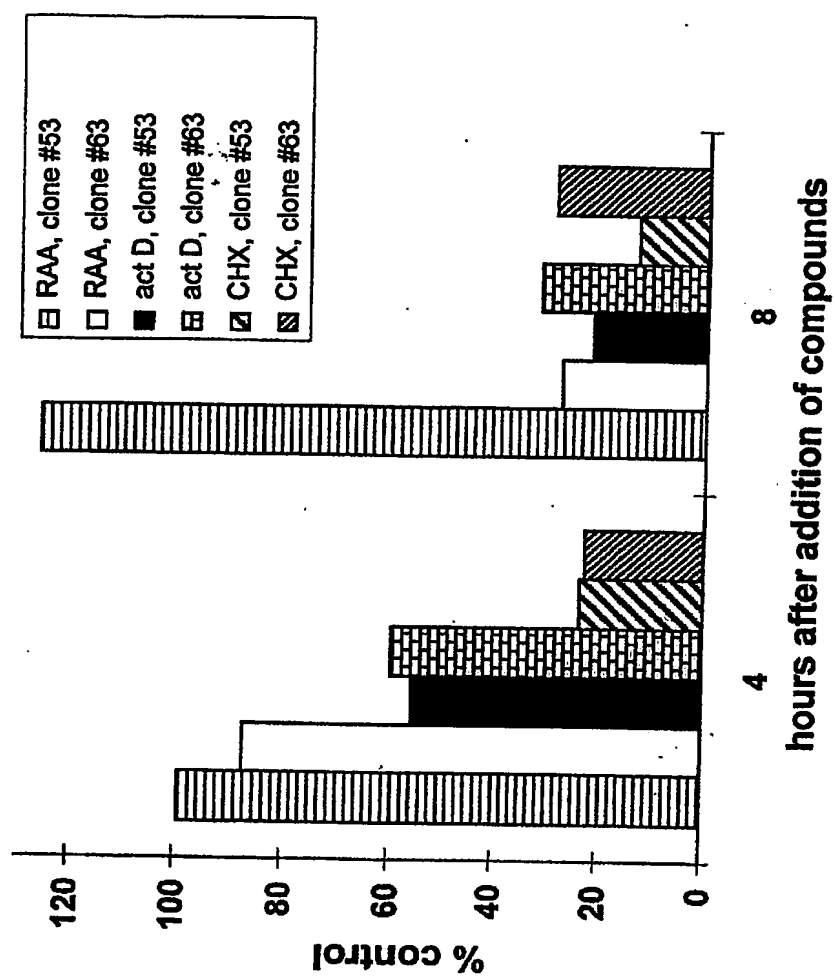


FIGURE 5

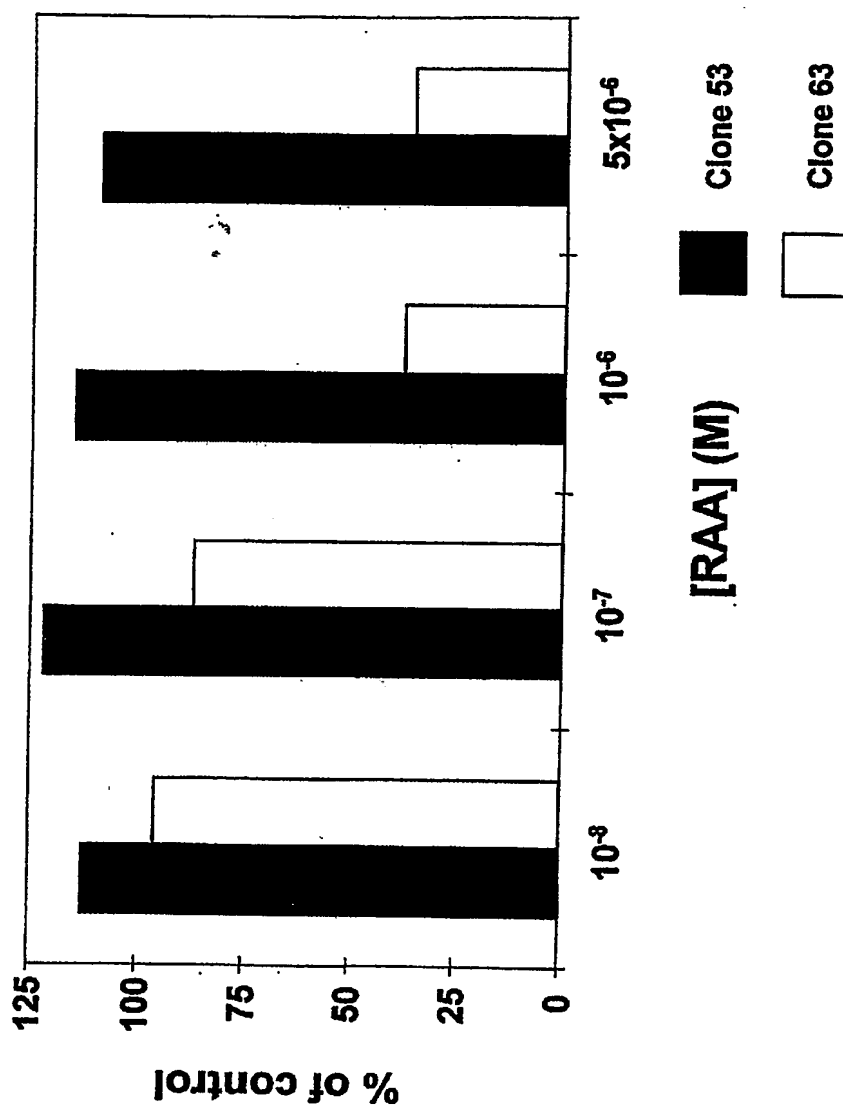


FIGURE 6

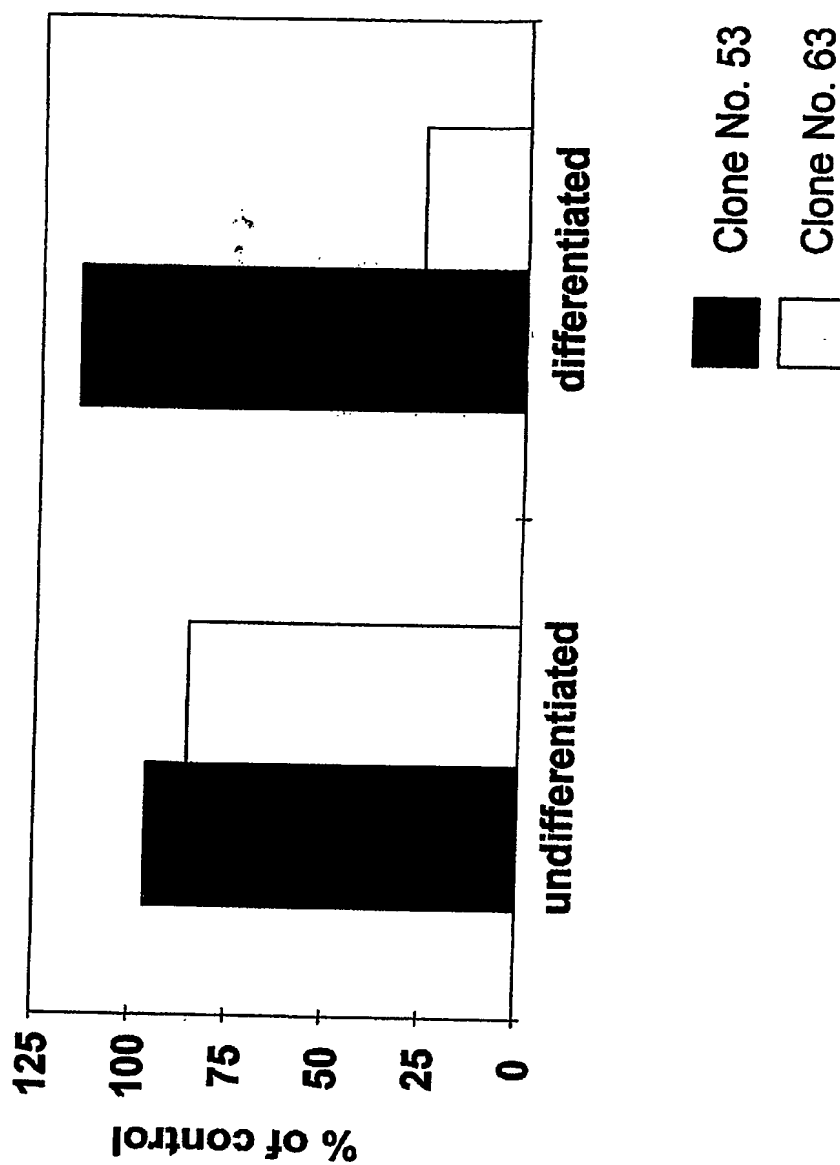


FIGURE 7

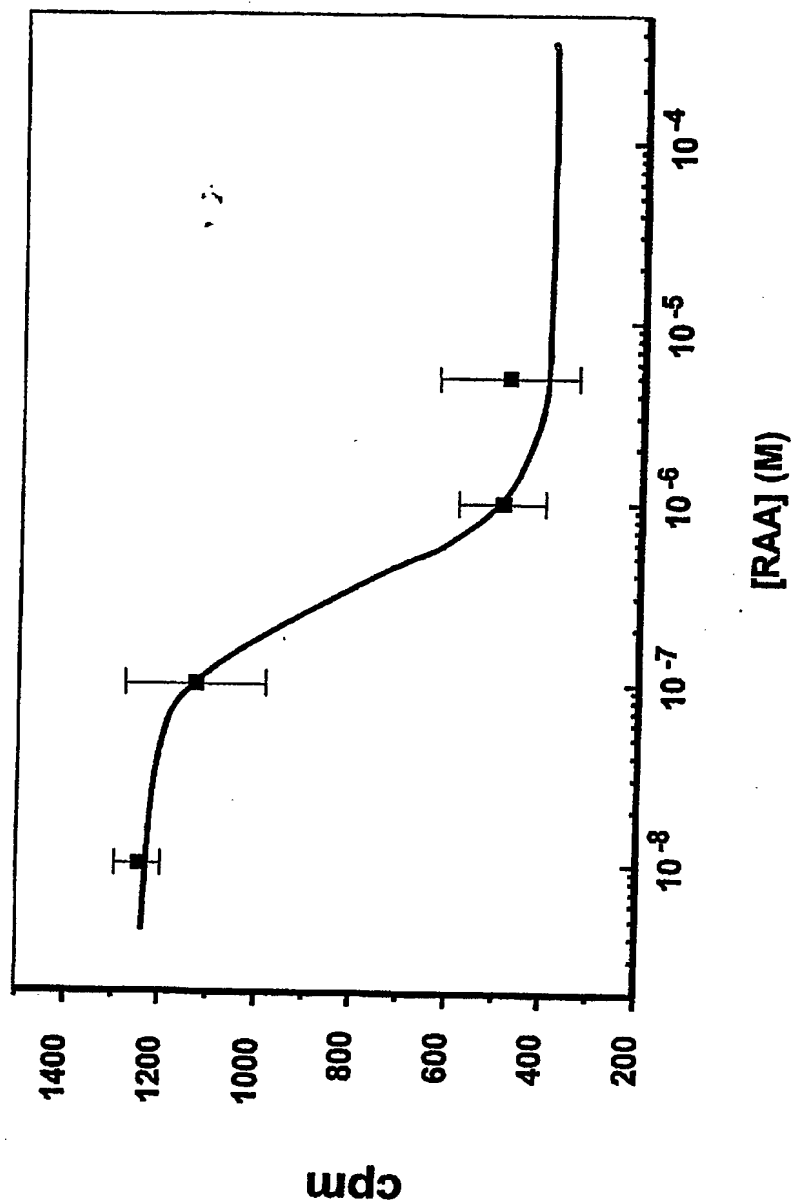



FIGURE 8

APP construct:  **■ AUUUA {Bold/Underline}**
★ potential polyA signal sequence {Bold/Italics}
Restriction Sites {Bold}

	NotI
1	GGGCGCCCA CAGCAGCCTC TGAAGTTGCA CAGCAAAACC ATTGCTTCAC TACCCATCGG TGTCACATTA TAGATAAAG TGGGAAGAAA CAARCCCGTT
101	TTATGATTTA CTAATTATCG CCTTTTGACA GGTGTGCTGT AACACAACTA GATGCTGAA CTTGAAATTA TCCACACATC AGTAATGTAT TCTATCTCTC
201	TTTACATTTT GGTCTCTATA CTACATTATT AATGGGTTT GTGTACTGTA AAGAAATTAG CTGTATCAAA CTAGTGCATG AATAGATTCT CTCCTGATTA
301	TTTATCAGAT AGCCCCCTTAG CCAGTTGTAT ATTATCTTG TGGTTTGTGA CCCAATTAAG TCCCTACTTA CATATGCTTT AAGAAATCAT GGGGGATGCT
401	TCATGTGAAC GTGGGAGTTC AGCTGCTTCT CTGCTCTAG TATTCCTTC CTGATCATA TGCATTTTAA AGTTAAACAT TTTTAACTAT TTCAGATGCT
501	TTAGAGAGAT TTTTCTTCC ATGACTGCAT TTTACTGTAC AGATTGCTGC TTCTCTATA TTTGTGATAT AGGAATTAAG AGGATACACA CGTTTGTTC
601	TTGCTGCTCG TTTTATGTGC ACACATTAGG CATTGAGACT TCAAGCTTTT CTTTTTTTGT CCACGTACTT TTGGGCTTT GATAAAGAAA AGATCCCTG
701	TTCAATTGTA GCACTTTAC GGGCGGGTG GGGAGGGTG CTCTGTGGT CTTCATTAAC CAAGATTCT CCAAAACAT TTTCTGCAGG ATGATTGTAC
801	AGATCATTTG CTTATGACAT GATCGCTTTC TACCTGTAT TACATTAATA AATTAATAA AATTAACCCG GGCAGAGACTT TTCTTTGAAG GATGACTACA
901	GACATTAAT AATCGAGTA ATTTTGGGTG GGGAGAGAG GCAATTCAA TTTTCTTTAA CCAGTCTGAA GTTTCATTTA TGATACAAA GAAGATGAAA
1001	ATGGAGTGG CAAATAAGG GGATAGGAA GGCATGCCCTG GACAAACCT TCTTTTAGA TGTGCTCTCA ATTGTATTA AATGGTGTTC TCATGTAGCG
1101	GCGGC
	NotI

FIGURE 9

Length: 1105 bp

stop codon {***Bold/Italics/Underline***}bcl-2 α -long construct: 

■ AUUUA {**Bold/Underline**}

Restriction Sites {**Bold**}

NotI

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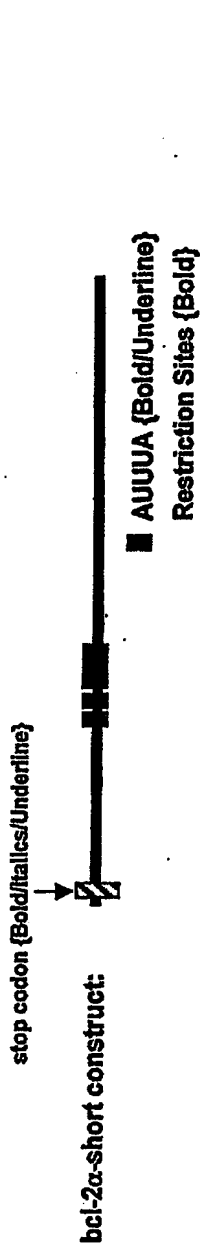
1  GCGGCGCGCTG AGTCAACAT GCGTGCOCOA AACAAATATG CAAAGGTTT ACTAAGCAG TAGAATATAT ATGCATTTGTC AGTGATGTAC CATGAACAA
101 AGCTGCGGGC TGTTTAAGAA AAATATACAC ACATATTAAC ATCACAACA CAGACACACA CACACATTA CAGTCTTCAG GCRAACGTC
201 GATCAGCTA TTTACTGCCA AAGGGAATA TCATTATTT TTTACATAT TAAGAAAAA AGATTATTT ATTTAAGACA GTCCCATCRA AACTCTGTC
301 TTTGGAATC CGACCACTAA TTSCCAASCA CGCTTCGTG TGCCTCCAC TGAATCTCT GTGCTGTAA ACATAGATT GCTTTCCATG TTGTTGGCGG
401 GATCACCATC TGAAGACAG ACGGATGGAA AAGGACCTG ATCATTTGGG AAGCTGGCTT TCTGGCTGCT GGAGCTGGG GAGAAGTGT TCATTTCCTT
501 GCAATTTCTT GCGCTGGGG CTGTATATT MACAGAGGA GGGTTCTGT GGGGGGAAGT CCATGCTCC CTGCGCTGAA GAAGGACTC TTTCATATG
601 ACTCACATGA TGCATACCTG GTGGGAGGA AAGAGTTGG AACTTCAGT GGACCTAGTA CCACATGAGA TTTCCACGCC GAAGGACAG GATGGGAATA
701 ATGCCCTTAA ATCATAGGA AATATTTTT TAAGCTACCA ATTGTGCGA GAATACCAT TTAGCATTT ATCAATATC ATCCAGTACC TTAAGCCCTG
801 ATTGTGTATA TTCAATATT TTGGATACG ACCCCCCAAC TCCATTAAT GGTCTGTCT GAGTAAGAA CAGATCTCT TGGACTTGA GGAAGTGGG
901 CCGC

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NotI

Length: 904 bp

FIGURE 10



NotI

1 GCGGCCGCTG AGTCAACAT GCGTGGCCCA AACHAATATG CHAAGGTTTC

51 ACTRAGCAG TAGAATAAT ATGCAATTGTC AGTGATGTAC CATGAACAA

101 AGCTGCAGGC TGTTTAAGAA AAATATACAC ACATATAAAC ATCACACACA

151 CAGACAGACA CACACACACA CAACAATTAA CAGTCCTCAG GCHAAACGTC

201 GAATCAGCTA TTTACTGCCA AAGGGAATA TCATTATTT TTTACATTAT

251 TAAGAAAAAA ACATTTAATT ATTTAAGACA GTCCCATCAA AACTCCTGTC

301 TTTGGAAATC CGACCACTAA TTGCCAAGCA CCGCTTCGTG TGGCTCCACC

351 TGGATGTTCT GTGCCGTGTA ACATAGATTC GCTTTCATG TTGTTGGGCG

401 GATCACCATC TGAAGAGCAG ACGATGGA AAAGGACCTG ATCATTTGGG

451 AAGCTGGCTT TCTGGCTGCT GGAGGCTGGG GAGAAGGTGT TCATTCACTT

501 GCATTTCTTT GCCCTGGGG CTGTGATATT AACAGAGGGA GSGTTCCTGT

551 GGGGGGAGT CCATGCCCTCC CTGGCCTGAA GAAGAGACTC TTTGCAATAG

601 ACTCACATGA TGCATACCTG GTGGGAGGAA AAGAGTTGGG AACTTCAGAT

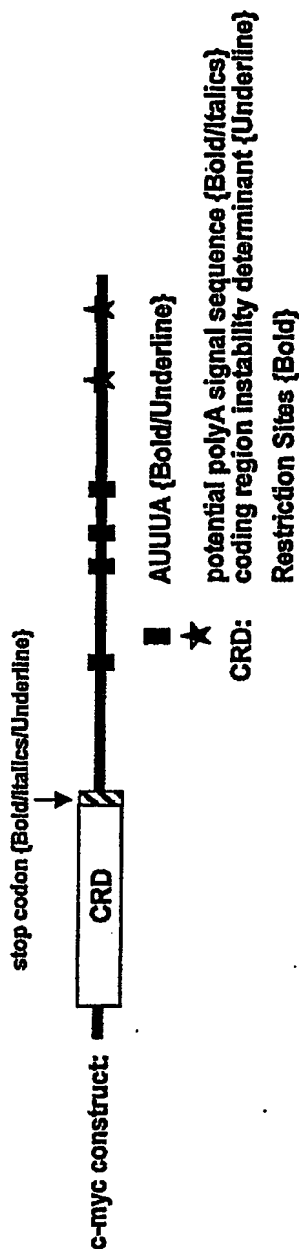
651 GGACCTAGTA CCACCTGAGA TTTCCACCCC GAAGGACAGC GATGGGAAA

701 ATGGGCGCC

NotI

Length: 710 bp

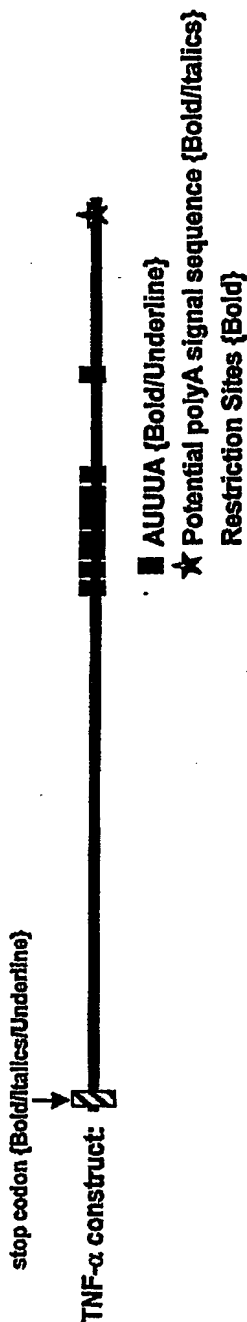
FIGURE 11



NotI	
1	CGCGCCGCTC GAGCTTTT TGCCTGGT GACGATCC CGGAGTTGA
51	AAACAATGAA AAGCCCCCA AGGTAGTTAT CCTTAAAAA GGCACAGCAT
101	ACATCCTGTC CGTCCRAGCA GAGGAGCAA AGCTCATTC TGAAGAGGAC
151	TTGTTCGGA AAGGACGAGA ACAGTTGAAA CACAACTTG AACAGCTACG
201	GAATCTTGT GGTAGGAA AGSTAAGGAA AAGGATTCCT TCTGACAGAA
251	ATGTCCTGAG CAATCACCTA TGAATTTGTT TCAATGCTAT GATCAATGTC
301	AACCTCACAA CCTTGGCTGA GTCTTGAGAC TGAAGATTI AGCCATTAAG
351	TAACTGCTT CAATTTGGAC TTTGGGCATA AAAGAACTTT TTTATGCTTA
401	CCATCTTTT TTTTCTTTA ACAGATTGT ATTAGAAT TGTTTTAAA
451	AAATTTAAG ATTACACAA TGTTCCTCG TAAATATTC CATTAATGT
501	AATAAATTT AATAAACGT TTATAGCAGT TACACAGAAT TTCATTCCTA
551	GTATATAGTA CCTAGTANTA TAGGTACTAT AAACCTAAT TTTTATTAT
601	TAACTACATT TTGCTTTTA AGTTGATTT TTTTCTATTG TTTTAGAAA
651	AATAAATA ACTGGCAAT ATATCATGA GCCATAG
	NdeI

Length: 688 bp

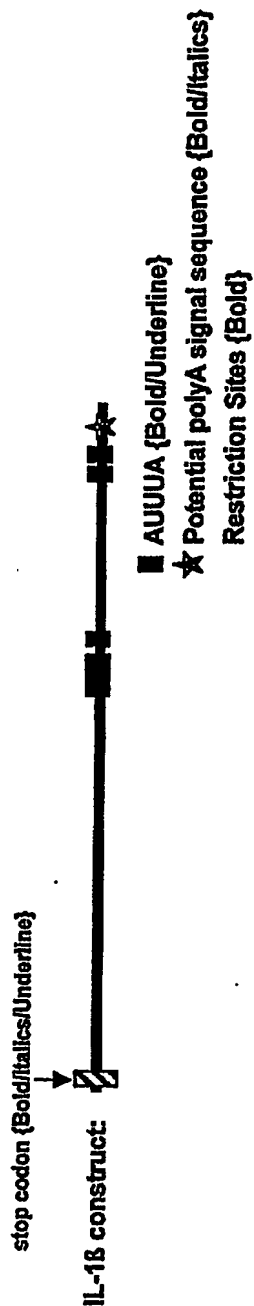
FIGURE 12



NotI	
1	GGGGGGCTG AGGAGGAGA ACATCCAAC TTCCCAACG CCTCCCTGC CCCATCCCT
61	TTATTACCC CTCCTTCAGA CACCTTCAC CTCCTTCGG TCBAAGAGG AATTGGGGC
121	TTAGGTGG AACCAAGCT TAGACTTTA AGCAACAGA CCACCCTTC GAACCTGGG
181	ATTCAGGAT GTGTGGCTG CACAGTAGG TGCTGGCAC CACTAAGAT TCBAACCTGGG
241	GCCTCCAGA CTCACGGGG CCTACAGCTT TGATCCCTGA CATCTGGAT CTGGAGACCA
301	GGGAGCTTT GGTCTGCCC AGAAGCTGC AGGACTGAG AAGACCTCAC CTAGAAATTG
361	ACACAGTGG ACCTTAGGCC TTCTCTCTC CAGATGTTT CAGACTTCT TCGACACGG
421	AGCCAGCCC TCCCATGGA GCCAGTCC TCTATTATG TTGCACTTG TGATTATTTA
481	TTATTATTT ATTATTATT TATTACAGA TGAATGATT TATTGGGAG ACCGGGTAT
541	CCTGGGGAC CCATGTAGG AGCTGCTTG GCTCAGACAT GTTTCGGTG AAAACGGGC
601	TGACAAATAG GCTGTCCCA TGTAGCCCC TGSCCTCTGT GCCTCTTTT GATTATGTT
661	TTTAAATAT TTATCTGATT AAGTTGCTA AACATGCTG ATTGGTGAC CACTGTAC
721	TCATTGCTGA GCCTCTGCTC CCCAGGGAG TTGTGTCTGT AATGCCCTA CTATTCAGTG
781	GCGAGAAATA AGTTTGCTT CATATG
NdeI	

Length: 806 bp

FIGURE 13



Length: 613 bp

FIGURE 14

	NotI	
1	GGGGCGCTA <u>AGAGAGCTG</u> TACCACAGA GTCTGTGCT GAATGSGAC	
51	TCAATCCTTA GGGCTGGCAG AAGGGAACA GAAGGTTTT TERGTACGGC	
101	TATAGCCTGG ACTTTCCTGT TGTCTACCC AATGCCAAC TGCCTGCCIT	
151	AGGTAAGTC TAAGAGGATC TCTGTCCAT CAGCCAGGAC AGTCAGTCT	
201	CTCCTTTCAG GGCCAATCC CAGCCCTTT GTTGAGCCAG GCGTCTCTCA	
251	CGTCTCCTAC TCACCTTAAG CCGCCCTGAC AGAAACCCG GCCACATTTG	
301	GTTCTAAGAA ACCCTCTGTC ATTGGCTCC ACATTCTGAT GAGCAACCGC	
351	TTCCCTATT <u>ATTATATTAT</u> TTGTTTGTIT GTTTTATCA TTGGTCTAAT	
401	TTAATCAAAG GGGGCAGAA GTAGCAGTGT CTGTAAAGA GCGTAGTTTT	
451	TAATAGCTAT GGAATCAATT CAATTGGAC TGGTGTGCTC TCTTTAAATC	
501	AGATCCTTTA ATTAAAGCTG AAATATATA AGCTCAGATT <u>ATTTAAATG</u>	
551	GAATATTAT <u>AAATGAGCAA</u> ATATCATCT GTTCAATGGT TCTGAATATA	
601	ACTTCACCAT ATG	NdeI

VEGF construct: 

- AUUUA {Bold/Underline}
 ★ Potential polyA signal sequence {Bold/italics}
 Restriction Sites {Bold}

	NotI
1	GGGCGCCCAT TGCCTGTGCTT TGGGGATTC CTCACATGC TGCACGGCA TCTGCCCCC AGGGCACTG CTGGAGAT TCAGAGCCT GGGCGGCTT
101	CGCTTACTCT CACCTGCTTC TGAGTTGCC AGGAGGCCAC TGGCAGTGT CCGGGCGAAG AGAAGAGCA CATGTGTTGA AGAAGCAGCC CATGACAGCT
201	CCCTTCCCTG GGACTCGCC TCACTCTCTT CCTGCTCCC CTGCTGGGT GAGCCTAAA AGGACCTATG TCCTCACACC ATTGAAACCA CTAGTTCTGT
301	CCCCCAGGA GACCTGGTGG TGTGTGTG AGTGGTTGAC CTTCCTCCAT CCGCTGGTCC TTCCCTTCCC TTCCCGAGGC ACAGAGAGAC AGGGCAGGAT
401	CCACGTGCC ATTGTGGAG CAGAGAAAG AGAAGTCTT TTATATACG TACTTATTA ATATCCCTTT TTAATTAGAA ATTAAAACAG TTAATTAAAT
501	TAAGAGTAG GGTITTTTTT CAGTATCTT GGTAAATAT TAATTCAAC TAATTAGAG ATGTATCTTT TGCTCTCTCT TGCTCTCTTA TTGTACCGG
601	TTTTTGTATA TAAATTCAT GTTCCAATC TCTCTCTCCC TGTGCGTGA CAGTCACTAG CTTATCTTGA ACAGATATTT AATTTGCTA ACATCAGCT
701	CTGCCCTCCC CGATCCCTCG GCTCCCGAGC ACATCTCCT TTGAATAG GTTCAATAT ACATCTACAT ACTATATATA TATATTTGSC AACTTGTATT
801	TGTGTGTATA TATATATATA TATGTTTNG TATATATG AGTCTGATTA AATAGACATT GCTATCTCTG TTTTATATAG TAAAGACAAA ACAAGAAAAA
901	ATAGAGAAAT CTACATACTA AATCTCTCTC CTTTTTAAAT TTTATATTT GTTATCAATTT ATTTATTGCT GCTACGTGTT ATCGTATAA ATTGTGGGA
1001	AAGATATATA ACATCAGTC TTGTCTCTCA GTGCAGTTT TCGACATAT CCGTAGTACA TATTTATTTT TAAACAAGA CAAGAATAA CAGACATAT
1101	G
	NdeI

Length: 1101 bp

FIGURE 15

VEGF 3'UTR hypoxia domain construct: 

■ AUUUA {Bold/Underline}
Restriction Sites {Bold}

NotI	
1	GGGCGCGCAT TCCTGTAGAC ACACCCACCC ACATACATAC <u>ATTTATATAT</u>
51	ATATATATTA TATATATATA AAAATAAATA TCTCTATTTT ATATATATAA
101	AATATATATA TTCTTTTTTT AAATTAAACAG TGCTAATGTT ATTGGTGTCT
151	TCAC TGGATG AACATATG
NdeI	

Length: 168 bp

FIGURE 16

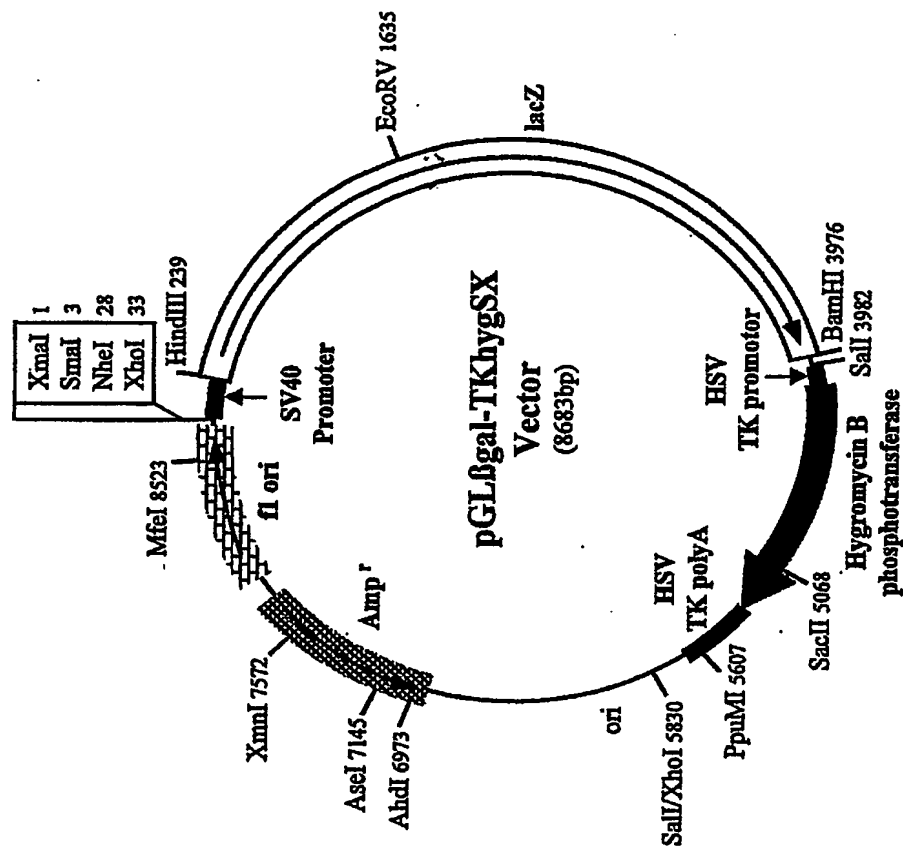


FIGURE 17

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